

**ARIZONA GAME AND FISH DEPARTMENT
HABITAT PARTNERSHIP COMMITTEE
HABITAT ENHANCEMENT AND WILDLIFE MANAGEMENT PROPOSAL**

Game Branch / HPC Project Number: 12-404

PROJECT INFORMATION

Project Title: Kofa Bighorn Sheep Recollaring

Region and Game Management Unit: Region 4, GMU 45

Local Habitat Partnership Committee (LHPC):
• Southwest Arizona

Was the project presented to the LHPC?
YES[] NO[X]

Has this project been submitted in previous years? YES[] NO[X]

If Yes, was it funded? YES[] NO[] → **Funded HPC Project #(s):**

Project Type: Population Monitoring/Predator Control

Brief Project Summary: Up to 20 bighorn sheep, some already with old radio collars, will be captured in the West Kofa Mountains, VHF collars attached, and then released at the point of capture. These bighorn will be monitored with fixed-wing telemetry flights to determine time and cause of death to evaluate the effect of recent mountain lion control.

Big Game Wildlife Species to Benefit: Bighorn Sheep – 100%

Implementation Schedule (Month/Day/Year):

Project Start Date: November 2013

Project End Date: June 2017

Environmental Compliance:

NEPA Completed: Yes[X] No[] N/A[]

Projected Completion Date: _____

State Historic Preservation Office - Archaeological Clearance:

Yes[] No[] N/A[X]

Projected Completion Date: _____

Arizona Game and Fish Department EA Checklist: N/A[]

To be Completed by: Bob Henry, Game Specialist, Region 4

Projected Completion Date: September 2012

PROJECT FUNDING

Special Big Game License Tag Funds Requested: \$ 25475

Cost Share or Matching Funds: \$ 0

Total Project Costs: \$ 25475

PARTICIPANT INFORMATION

Applicant (please print):

Bob Henry

Address:

9140 E 28th St

Yuma, AZ 85365

E-mail:

bhenry@azgfd.gov

Telephone: 928-341-4048

Date: 9/4/2012

AGFD Contact and Phone No. (If applicant is not AGFD personnel):

Project has been coordinated with:

U.S. Fish and Wildlife Service

NEED STATEMENT – PROBLEM ANALYSIS:

Between the years 2000 and 2006 the bighorn sheep population on Kofa NWR declined by 50%. An investigative report was written and a number of management prescriptions were proposed to help recover the population. One of the management actions that have been carried out was control of lion predation. In order to determine the effects of this action, 20-30% of the ewes in GMU 45A were radio-collared, many with satellite GPS collars, and the causes of mortality determined. Over half of bighorn deaths from 2008 through 2011 were caused by lion predation. Significant lion control has finally been attained in 2011 and 2012, just as many of the collars are reaching their end of life. Some bighorns need to be recollared and some new animals need to be collared in order to maintain a sample of sheep to be able to measure the effect of the predator control efforts.

PROJECT OBJECTIVES:

- 1) Maintain radio collars on 20-30% of bighorn ewes in GMU 45A
- 2) Monitor collared bighorns to determine cause of death
- 3) Determine if mountain lion control efforts have been effective in reducing bighorn mortality rate

PROJECT DESCRIPTION AND STRATEGIES:

- 1) Capture and collar up to 20 bighorn sheep in the West Kofa Mountains using helicopter and net-gun
- 2) Inspect captured bighorns for injury, take blood samples for disease screening
- 3) Replace existing collars or place new VHF collars on captured sheep
- 4) Release bighorn at location of capture
- 5) Monitor collared bighorn with aerial telemetry and investigate all bighorn mortalities
- 6) Compare predation rates with rates before lion control was attained

PROJECT LOCATION:

West Kofa Mountains in the Kofa National Wildlife Refuge (map below)

LAND OWNERSHIP AT THE PROJECT SITE(S):

(if the project area is private property, please state specifically and provide the landowner's name)

- U.S. Fish and Wildlife Service

HABITAT DESCRIPTION:

The Kofa Mountains contain Sonoran desert scrub throughout with pockets of interior chaparral in protected canyons, and with rocky, steep mountain ridges.

ITEMIZED USE OF FUNDS:

Special Big Game License Tag Funds

Helicopter Services:

Capture - 1 ship, 3 days, 5 hours per day
15 hours @ \$925/hr = \$13875

Ferry - 4 hours @ \$650/hr = \$ 2600

Radio Collars:

20 Mod500 VHF collars @ \$300 = \$ 6000

Disease Testing/Lab:

20 animals @ \$100/animal = \$ 2000

Miscellaneous Supplies (ear tags, medical, etc.)

= \$ 1000

Total = \$25475

Cost Share or Matching Funds (for volunteer labor rates please refer to the worksheet below)

LIST COOPERATORS AND DESCRIBE POTENTIAL PARTICIPATION:

U.S. Fish and Wildlife Service (NEPA and labor)

WOULD IMPLEMENTATION OF THIS PROJECT ASSIST IN PROVIDING, MAINTAINING, OR FACILITATING RECREATIONAL ACCESS?

YES[] NO[X] N/A[]

PROJECT MONITORING PLAN:

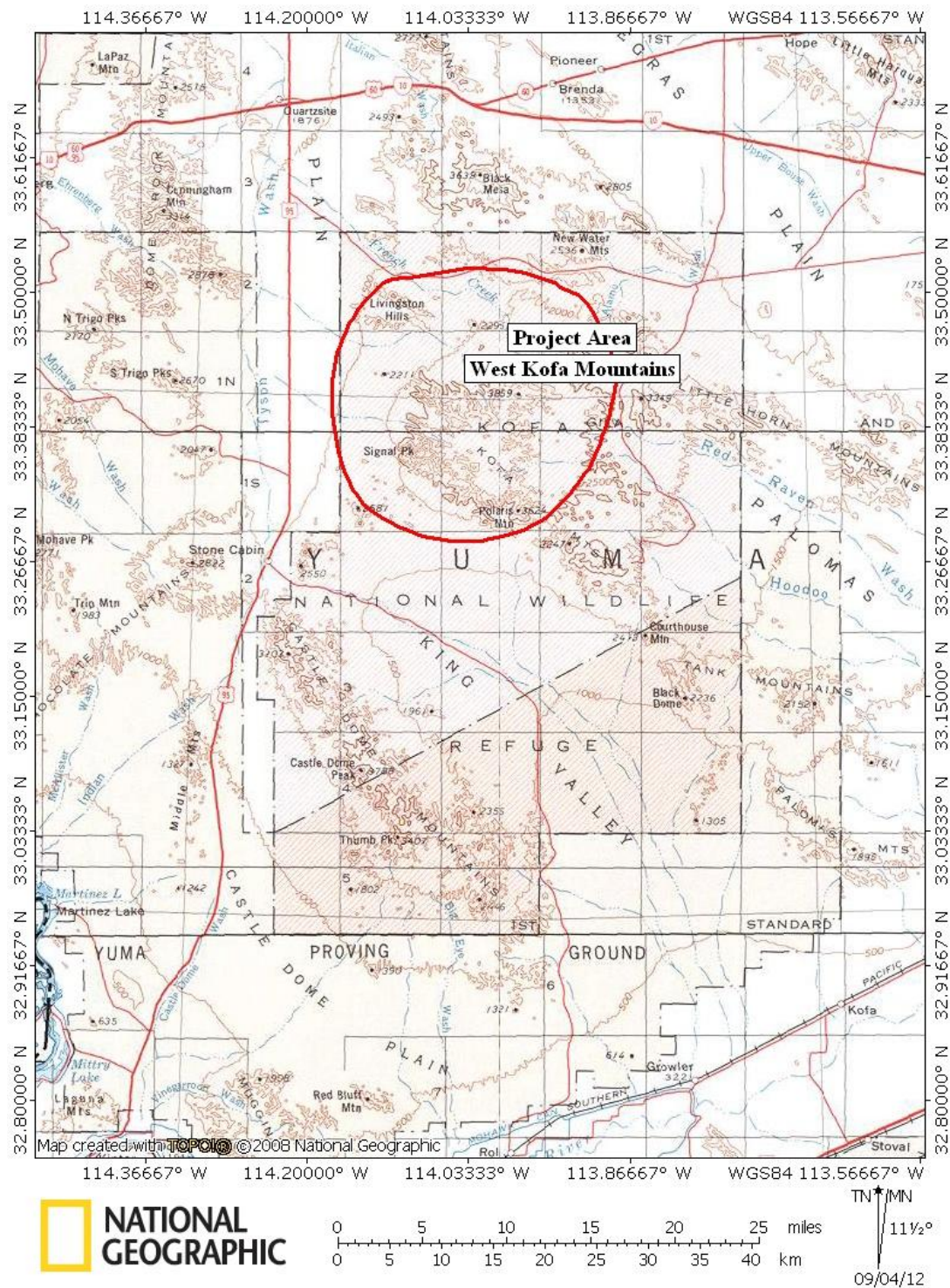
Region 4 will monitor the collared animals with at least monthly radio telemetry flights using fixed-wing aircraft for the life of the transmitters or at least 3 years. When mortalities are detected, they will be investigated promptly.

PROJECT MAINTENANCE:

N/A

PROJECT COMPLETION REPORT TO BE FILED BY:

Bob Henry, Game Specialist, Region 4



Overview map of project area